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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,732	10/29/2003	Cheng-Liang Hou	58268.00324	2651

32294 7590 04/19/2007  
SQUIRE, SANDERS & DEMPSEY L.L.P.  
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TYSONS CORNER, VA 22182

EXAMINER
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JAIN, RAJ K

ART UNIT	PAPER NUMBER
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2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/694,732

Applicant(s)

HOU, CHENG-LIANG

Examiner

Raj K. Jain

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

Claim 9 is objected to because of the following informalities: In line 5 the term "capable of" does not limit the scope of the claim. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8-14 and 16-21 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Honkasalo et al (USP 6,219,343 B1) because the invention was described in a patented or published application for patent by another filed in the United States before the invention thereof by the applicant for patent.

Regarding claims 1, 8, 9 and 16, Honkasalo discloses a method and system and computer readable medium (see abstract, col 4 lines 43-55), comprising:

incrementing a port transmission rate using a variable resolution (see col 7 lines 2-17, claim 5, Figs. 5 and 6, the port transmission rate is varied based using differing data rates at different regions R1, R2, R3, etc.); and

transmitting data through the port using the incremented port transmission rate (see col 6 lines 39- col 7 line 40, a maximum data rate is determined for each port of transmission/reception and further incremented in proportion to an higher

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accommodating transmission rate and transmitted thereafter accordingly, see Figs. 4a and 4b.).

Regarding claims 2, 10 and 17, Honkasalo discloses the resolution is a function of the rate (see Figs. 4a and 4b, data rates are based on user profiles for acceptable  $E_b/N_0$  ratios which is a function of rate, see col 7 lines 19-40.).

Regarding claims 3, 11 and 18, Honkasalo discloses the resolution is inversely proportional to the rate (see col 3 lines 15-25.).

Regarding claims 4, 12 and 19, Honkasalo discloses wherein the resolution decreases exponentially as the rate increases (see col 7 lines 25-40, as data rate increases the resolution decreases based on a given transmission power and therefore lower  $E_b/N_0$  values and more interference respectively.

Regarding claims 5, 13 and 20, the resolution is a function of segmented rate ranges (see Fig. 5, resolutions are segmented according to regions.).

Regarding claims 6, 14 and 21, (see Fig. 5) resolution is 64 Kbps in a first range (region 1), 1 Mbps in a second range, and 8 Mbps in a third range (regions Ln-2, Ln-3).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 15 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honkasalo et al (USP 6,219,343 B1) in view of Miao (US 2004/0017306A1)

Honkasalo discloses segmented data rates upto 64 kbps (see Fig.5), however, Honkasalo fails to disclose segmented data rates in range above 2Mbps to 1000Mbps.

Miao discloses segmented data rates in range above 2Mbps to 1000Mbps, (see Fig. 6, paras 35-37, the Mux 132 produces on of several data in range from 50Mbps to 1 Gbps.). The inclusion of an scalable high speed data rate converter allows for multiple sources of data reception of various resolutions and magnitude including audio, video, HD video, high speed data transference, etc..

Thus it would have been obvious at the time the invention was made to incorporate the teachings of Miao within Honkasalo so to improve network capabilities by allowing for multiple input sources of differing magnitude to be incorporated in a network as desired.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raj K. Jain whose telephone number is 571-272-3145. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**Raj K. Jain**



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April 17, 2007